# 5. 510(K) SUMMARY

| Submitter's Name:          | Emerge Medical  |  |
|----------------------------|---|--|
| Submitter's Address:       | 720 S. Colorado Blvd.                                       |  |
|                            | Suite 550-S   |  |
|                            | Denver, CO 80246  |  |
| Submitter's Telephone:     | (866) 553-0376  |  |
| Submitter's Fax:           | (800) 698-1440  |  |
| Authorized Contact Name:   | Michelle Potvin   |  |
| Contact's Telephone:       | 720.459.6392  |  |
| Contact's Email:           | michelle.potvin@emergemedical.com                           |  |
| Date Summary was           | November 15 <sup>th</sup> , 2013                            |  |
| Prepared:                  |   |  |
| Trade or Proprietary Name: | Emerge Medical Bone Plate System                            |  |
| Common or Usual Name:      | Single/multiple component metallic bone fixation appliances |  |
|                            | and accessories (§888.3030)                                 |  |
| -                          | Smooth or threaded metallic bone fixation fastener          |  |
|                            | (§888.3040)   |  |
| Classification:            | Class II per 21 CFR §888.3030                               |  |
|                            | Class II per 21 CFR §888.3040                               |  |
| Product Codes:             | HRS, HWC  |  |
| Classification Panel:      | Orthopedic and Rehabilitation Devices Panel                 |  |

#### DESCRIPTION OF THE DEVICE SUBJECT TO PREMARKET NOTIFICATION:

The Emerge Medical Bone Plate System consists of stainless steel and titanium components including locking plates, cortex screws, cancellous screws, and washers. The plates are available in a variety of lengths with the number of holes varying depending on plate length. The screws and plates are provided non-sterile.

The device description for the Emerge Medical Bone Plate System is similar to that of the predicate devices listed in Table 5.1 Predicate Devices.

#### TECHNOLOGICAL CHARACTERISTICS

The fundamental scientific principles and technological characteristics, including the intended use, material, general design, and sizes of the device are equivalent to the predicate device.

### INDICATIONS FOR USE .

The indications for the Emerge Medical Bone Plate System are as follows for the four subsystems:

The Emerge Medical Locking Mini Fragment System is intended for fixation of fractures, osteotomics, non-unions, deformations, revisions, replantations, of small bones and bone fragments including tarsals, metatarsals, carpals, metacarpals, phalanges, calcaneus, hand, wrist, foot, and ankle, including in osteopenic bone.

The Emerge Medical Non-Locking Mini Fragment System is intended for fixation of fractures, osteotomies, non-unions, deformations, revisions, replantations of small bones and bone fragments including tarsals, metatarsals, phalanges, calcaneus, hand, wrist, foot, and ankle, including in osteopenic bone.

The Emerge Medical Non-Locking Modular Hand System is intended for fixation of fractures, osteotomics, non-unions, deformations, revisions, replantations, of bones and bone fragments including phalanges, hand, and wrist, including in osteopenic bones.

The Emerge Medical Modular Foot System is intended for fixation of fractures, osteotomics, non-unions, deformations, revisions, replantations, of bones and bone fragments including tarsals, metatarsals, calcaneus, foot, and ankle, including in osteopenic bone.

The indications for use for the Emerge Medical Bone Plate System is similar to that of the predicate devices listed in Table 5.1 Predicate Devices.

| 510k Number | Trade or Proprietary or Model Name       | Manufacturer |
|-------------|--|--------------|
| K030310     | Synthes Modular Hand System              | Synthes      |
| K001941     | Synthes Modular Foot System              | Synthes      |
| K020401     | Synthes Calcaneal Plate                  | Synthes      |
| K063049     | Synthes Mini Fragment LCP System         | Synthes      |
| K011335     | Synthes One-Third DCL Plate              | Synthes      |
| K010321     | Synthes Modular Foot System-2.7mm Module | Synthes      |

Table 5.1 Predicate Devices

#### PERFORMANCE DATA

The Emerge Medical Bone Plate System has been tested in the following test modes:

- Dynamic four-point bending per ASTM F382-99 (2008)
- Static torsion testing per ASTM F543-13 (2013)
- Static axial pullout per ASTM F543-13 (2013)

The results of this non-clinical testing show that the strength of the Emerge Medical Bone Plate System is sufficient for its intended use and is substantially equivalent to legally marketed predicate devices.

## CONCLUSION

The overall technology characteristics and mechanical performance data lead to the conclusion that the Emerge Medical Bone Plate System is substantially equivalent to the predicate device.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

### February 26, 2014

Emerge Medical
Ms. Michelle Potvin
Vice President of Quality Assurance
720 South Colorado Boulevard, Suite 550-S
Denver, Colorado 80246

Re: K133536

Trade/Device Name: Emerge Medical Bone Plate System

Regulation Number: 21 CFR 888.3030

Regulation Name: Single/multiple component metallic bone fixation appliances and

accessories

Regulatory Class: Class II Product Code: HRS, HWC Dated: December 2, 2014 Received: December 4, 2014

#### Dear Ms. Potvin:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical

device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <a href="http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm">http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</a> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Vincent J. Devlin -S

for Mark N. Melkerson Director Division of Orthopedic Devices Office of Device Evaluation Center for Devices and Radiological Health

**Enclosure** 

# 4. INDICATIONS FOR USE STATEMENT

Device Name: Emerge Medical Bone Plate System

The indications for the Emerge Medical Bone Plate System are as follows for the four subsystems:

The Emerge Medical Locking Mini Fragment System is intended for fixation of fractures, osteotomies, non-unions, deformations, revisions, replantations, of small bones and bone fragments including tarsals, metatarsals, carpals, metacarpals, phalanges, calcaneus, hand, wrist, foot, and ankle, including in osteopenic bone.

The Emerge Medical Non-Locking Mini Fragment System is intended for fixation of fractures, osteotomies, non-unions, deformations, revisions, replantations of small bones and bone fragments including tarsals, metatarsals, phalanges, calcaneus, hand, wrist, foot, and ankle, including in osteopenic bone.

The Emerge Medical Non-Locking Modular Hand System is intended for fixation of fractures, osteotomies, non-unions, deformations, revisions, replantations, of bones and bone fragments including phalanges, hand, and wrist, including in osteopenic bones.

The Emerge Medical Modular Foot System is intended for fixation of fractures, osteotomies, non-unions, deformations, revisions, replantations, of bones and bone fragments including tarsals, metatarsals, calcaneus, foot, and ankle, including in osteopenic bone.

| Prescription UseX AND/OR (Part 21 CFR 801 Subpart D) | Over-The-Counter Use (21 CFR 801 Subpart C) |
|--|---|
| (PLEASE DO NOT WRITE BELOW THIS                      |   |
|  |   |

Concurrence of CDRH, Office of Device Evaluation (ODE)

Elizabeth Frank -S

Division of Orthopedic Devices